Congratulations!

You have just purchased the highest quality, best performing A/C system ever designed for your Classic Car. To obtain the high level of performance and dependability our systems are known for, pay close attention to the following instructions.

Before beginning the installation check the box for the correct components.

Evaporator
Face Duct Assembly
Inlet Air Block Off Assembly
Firewall Block Off Assembly
Flex Hose 2" dia. x 3 ft.
Flex Hose 2" dia. x 4 ft x 2 ea..
Flex Hose 2 ½" dia. x 2 ft.
Sack Kit Louver
Sack Kit Hardware
Sack Kit Control
Glove Box
Check List, Pre-Installation:

☐ Before beginning the installation check the shipping box for the correct components. YOUR BOXED UNIT INCLUDES A LIST OF MAJOR COMPONENTS AND A LIST OF BAGGED PARTS. We have a 5 stage check process to make sure you have everything you’ll need.

☐ If your vehicle has been or is being modified, some procedures will need to be adjusted to fit your particular application.

☐ A basic cleaning of the engine compartment and interior before beginning will make things go more smoothly.

☐ Check condition of engine mounts. Excessive engine movement can damage hoses to A/C and/or heater.

☐ Before starting, check vehicle interior electrical functions (interior lights, radio, horn, etc). Make a note of anything that does not work as it’s supposed to. During the installation you might find the opportunity to repair or upgrade non-working or out of date components. When you’re ready to start the installation, DISCONNECT THE BATTERY FIRST.

☐ Drain the radiator. Retain the coolant and reuse, or dispose of properly.

☐ SAFETY FIRST: Wear eye protection while drilling/cutting, deburr sharp edges, and never get in a hurry or force a part.

☐ Tools: Your installation only requires the basic tools everyone has in their garage, nothing exotic or specific to A/C or Heat equipment.

Procedures, During Installation:

☐ Fittings: Use one or two drops of mineral oil (supplied with your kit) on ALL rubber o-rings, threads and where o-rings seat in fittings. Do not use thread tape or sealants.

☐ Measure twice (or more), cut once

☐ Should you have any technical questions, or feel you have defective components (or missing items), call us immediately, we will be glad to assist you. Our toll-free number is listed on every page, we’re here to help!

CAUTION: DISCONNECT BATTERY GROUND CABLE
YOU CAN NOW BEGIN THE INSTALLATION...
A Basic Overview of Automotive A/C....

1. **Evaporator with Blower Fan** In order to remove the heat from the air in the vehicle, the A/C evaporator allows the refrigerant to absorb the heat from the air passing over it. The blower fan moves cool air out into the car interior.

2. **Compressor** The compressor pumps and circulates the refrigerant through the system.

3. **Condenser** The condenser is a heat exchanger mounted at the front of the vehicle. Heat drawn out of the interior of the car is expelled here.

4. **Receiver/Drier** The drier not only dries refrigerant, it also filters the refrigerant and stores it under certain operating conditions.

5. **High Pressure Switch** A pressure switch is used to shut down the system if high or low pressure is detected, basically it acts as a safety switch.

The air conditioning system in your car is comprised of a compressor, condenser, expansion valve, receiver/drier, and evaporator. Refrigerant (also known as Freon) is compressed in the compressor. In the condenser, gas is cooled to a liquid state and travels to the expansion valve. As the liquid refrigerant goes through the expansion valve it rapidly cools in the evaporator. A fan blows over the evaporator and cools the air that blows out your vents.
The controls on your new “Perfect Fit” system. Offers complete comfort capabilities in virtually every driving condition. This includes Temperature control in all of the modes.

The picture you see shows the controls in the heat mode. This means that the air will be distributed through the heater outlets. This also has the temperature lever in the coldest position. With the controls in this position you will get the air through the heater outlets and the outlet temperature at the coldest possible degree.
CAUTION: ALL OF THE OUTSIDE VENTS MUST BE CLOSED WHEN THE SYSTEM IS IN THE A/C MODE. THIS WILL ALLOW THE A/C SYSTEM TO FUNCTION AT ITS MAXIMUM PERFORMANCE LEVEL.

THE FOLLOWING SUMMARY WILL DESCRIBE EACH OF THE CONTROL LEVERS FUNCTION.

FAN SPEED SWITCH: There are 3 speeds plus Off. When the switch is in the off position it will disconnect the 12V power to the Blower Motor and the A/C Clutch. This will shut down the entire system. When the switch is moved to any of the blower speeds 1,2 or 3 there is 12V supplied to the Micro-Switch which is mounted on the defrost air housing.

FLOOR / FACE / DEFROST MODE: When the CENTER lever is pulled all the way to the TOP, it will direct the air to the defrost outlets. When the lever is moved into the CENTER position the air is directed to the Dash Louvers. When the lever is pushed to the bottom, the air will be directed onto the floor outlets. When the lever is in the Defrost position the A/C Compressor is activated and provides Dehumidification.

TEMPERATURE CONTROL: The temperature lever as shown is in the HOTTEST temperature position. As the lever is pulled up the temperature of the discharged air will fall to the COLDEST point.
Note: The temperature lever will function in any of the modes.

AIR CONDITIONING MODE: The picture shows the controls in the A/C Mode (air-flow out the louvers). When Air Conditioning is required the compressor clutch must be activated. This is accomplished when the CENTER lever is in the Center position. When the compressor is activated the Temperature Lever will control the air from maximum cold through maximum heat.
Remove Glove box door and glove box, discard glove box retain original hardware.

Removal of Original Heater Assembly can be accomplished by disconnecting the three control cables. One attached to the Temperature door.

One attached to the Heat / defrost door. This can be found behind heater box next to the throttle cable.

The third cable is located on top of heater next to the defrost ducts.
Disconnect electrical harness at the resistor block.

Remove (4) screws located under the control head.

Remove the control head and set aside for modification and reinstall.

In order to remove the heater assembly it is necessary to remove the Blower Housing Assembly first.

Carefully lift vehicle and place support stands under center of the vehicle as shown.

It is necessary to lower the inner fender well on the passenger side. Remove the passenger front tire. Remove and retain (9) bolts from around the inner fender. Lower the inner fender well to gain access to (2) screws above and below the blower motor assembly.
Remove (7) screws around the perimeter of the Blower Housing. The (2) screws around the blower motor can be accessed from below and between fender well and fender.

Retain the (2) screws around blower motor.

Locate the Air Inlet Block Off Plate. Attach the block off behind the Hood Hinge assembly. Use the original hardware.

Reinstall Inner Fender Well using the original hardware. Reinstall front tire and remove the jack and stands.
DRAIN COOLANT FROM RADIATOR.

Remove Heater hoses from heater coil at firewall.

Remove heater assembly, located behind the glove box and discard.

Locate the Defrost Air Duct behind radio in the instrument panel.

Carefully trim the bottom section up to line as shown.

Locate in the hardware sack kit the 1/8” seal. Wrap around the opening as shown.
Locate on firewall the hole that previously mounted the heater box. From engine side drill (1) ¾” dia. hole for the drain tube as shown.

On last page of the instructions you will find a template.

Above radio and in the middle of instrument panel place template on dash.

Carefully ruff cut center out of dash using template as a guide.

Then go back with a file and open the hole so that the louver slides through and snaps in place. Insert louver into opening.
Locate behind control opening the original wire harness.

Cut off plug to the resistor.

Locate wire harness that was attached to the blower switch. Cut brown wire and attach a Male Spade connector. This is the power wire for the a/c unit.

Cut remaining wires from the plug as far as back possible.

Attach a Male spade connector to the brown wire as shown.

All of the modifications to the vehicle are complete we will now begin the installation of the Unit.

Locate the Evaporator, Defrost Duct Assembly and (2) #10 x 5/8” pan head screws. Attach defrost duct to evaporator using (2) #10 screws. Be sure that s-clips are pushed over outlet on the back side.

Attach wire harness from the actuator using diagram
NEXT STEP SHOWN FROM THE ENGINE SIDE

Place evaporator on the floor of the vehicle. Lift unit up and behind the glove box opening.

Insert upper rear Evaporator mounting stud through the original hole as shown. Attach using (1) ¼” – 20 flange nut provided.

Locate on front of the evaporator (2) evaporator support brackets.

Drill (2) 1/8” dia. holes through the braces and into the lower instrument panel.

Attach braces to the panel using (2) #10 x 5/8” pan head screw.

Locate Firewall Block Off plate, and (7) #10 x ¾” hex head tek screws.

On engine side of the firewall attach over the hookup tubes from evaporator using (7) #10 x ¾” hex washer head Tek screws.
Locate refrigeration tape provided and seal around the hookup tubes.

Locate the Water Valve and (3) worm gear clamps.

Supply line from engine is attached to the upper heater hookup tube. Cut 6” off end of the RETURN LINE and install the water valve using (3) worm gear clamps as shown above.

Note: It is recommended that you replace heater hoses from the engine to the hookup tubes.

Locate the original control assembly. Remove and discard the following components. Retain all original hardware.

(1) Original Blower Switch
(2) Heat Cable
(3) Temp Cable
(4) Air Shutoff Cable

Locate the control head.

Locate the Drill Template provided.

Align with the curved slot on side of the control head.

Drill (2) holes 1/8” dia.

Locate in control sack kit the blower switch, switch connecting wire, (1) 3/16” push nut, and
(2) #6 x 3/8” pan head Philips screws.
Place the blower switch into position. Attach using (2) #6 x 3/8” pan head screws.

Hook the wire through blower switch hole in the lever and then over the Control Lever. Use push nut to hold the connecting wire.

Locate in the control sack kit the (SHORT) Heat / Defrost control cable, the (LONG) Temperature control cable, (2) 3/16” push nuts and (2) Cable Clips.

Attach temperature control cable and clip to TOP lever using the original screw and 3/16” push nut.

Attach the Heat / Defrost cable to the MIDDLE lever using (1) cable clip, (1) push nut and the original screw.

Attach Wire Harness supplied in unit to the blower switch. Reference the wiring diagram on next page.

Reinstall control head using original hardware.

Route electrical assembly to Defrost Duct assembly and hookup the micro switch. Route main harness to resistor and blower motor. Route blue clutch wire over evaporator and out through hole in firewall above the unit. Secure ground from electronic actuator and blower motor using (2) #10 x ¾ “ hex head Tek screw.

REFER TO WIRING DRAWING ON NEXT PAGE FOR PROPER CONNECTIONS.
Connect power wire (brown / from the original harness) to Red / White stripe from the new harness supplied.

Insert light socket back into the control head.

Route temperature cable in front and over the evaporator assembly and out through hole above the unit. Attach this cable to the water valve.

Set control lever in the Cold position and be sure that the water valve is closed. Locate insulation tape and seal around cable at firewall.

Route defrost cable and attach to the defrost / heat duct. Insert cable into third hole at the bottom.

Attach using (1) #8 x 1/2” pan head Phillips screw.

Locate the face duct assembly. Attach to the evaporator outlet using s-clips at top and bottom of the duct.
Locate 2” Dia. flex hose, find (1) piece 36” long and cut to 32”. Attach to face duct to right outlet. Route above and behind glove box opening and down to the passenger kick panel.

Locate 2” Dia. flex hose, find (1) piece 36” long. Attach to face duct to left outlet. Route above and behind instrument cluster and down to the drivers kick panel.

Locate the 2” Dia. flex hose, find (1) piece 24” long and cut to 16”. Attach to face duct to top outlet. Route straight up and attach to the center louver.

Locate in the hardware sack kit (3) Under Dash Louvers. Attach (1) under center of Instrument Panel as shown. Attach using (2) #10 x 5/8” pan head screws. Also find (1) 12” of 2” dia. flex hose and cut to 8”. Attach flex hose to louver and back to front outlet on the face duct.

Attach (1) of the louvers under passenger side of the instrument panel using (2) pan head screws as shown.

Attach (1) of the louvers under drivers side of the instrument panel using (2) pan head screws as shown.

ATTACH FLEX HOSE TO BACK OF THE PASSENGER AND DRIVERS LOUVER ASSEMBLY
Install glove box and the glove box door using original hardware.

Caution: Carefully check under Instrument Panel for all cables, electrical harness or Flex Ducting that might interfere with safe operation of the vehicle.

Installation of the interior components is complete. We will now install the under hood portion of the unit.

Remove the hood latch assembly.

Retain all original hardware.

Locate the Condenser, (3) condenser mounting brackets and (6) #10 x 3/8” hex head screws. Attach brackets to the condenser as shown.
Slide condenser assembly between radiator bulkhead and the grille assembly.

Locate over the radiator mounting studs. Locate in the condenser kit (3) 5/16” nuts. Install 5/16” nuts as shown.

Locate the Top Left condenser mounting bracket, Receiver / Drier, Drier Mounting Bracket, #8 discharge Aluminum Liquid tube, #6 liquid tube (condenser to drier), (2) #6 o-rings, (1) #8 o-ring, and (2) #10 x 3/8” hex head screws.

Install Receiver drier to condenser on the bottom hole only. Location is fifth hole from the top.

Attach the Liquid Tube (condenser to drier) as shown. Install using a few drops of mineral oil on the o-ring fittings, and secure.

Picture shows attachment from lower condenser fitting to the drier.

IT IS NECESSARY TO REMOVE THE FRONT BUMPER TO INSTALL LIQUID TUBE
Attach discharge tube from the upper condenser fitting and route down.

Locate condenser tube support bracket, and (3) #10 tek screws from the condenser kit.

Attach bracket to bottom of the radiator bulkhead as shown.

Locate the liquid tube (drier outlet) and (1) #6 o-ring.

Attach liquid tube to outlet of the drier using (1) #6 o-ring and a few drops of mineral oil. Route under drier and over to the tube support bracket.

Attach the (2) tubes to the support bracket as shown. Tighten all fittings.

Locate the last condenser mounting bracket, (1) 5/16” nut, and (1) #10 x 3/8” hex head screws.

Attach bracket over the radiator stud. Attach mounting bracket to top hole of drier bracket and the condenser using (2) #10 x ½ hex head screws, and the 5/16” nut on the radiator stud.

Locate hi-low pressure switch and electrical harness from the condenser kit. Attach the switch to top of the drier using a few drops of mineral oil.

Attach electrical harness to the pressure switch and route wires into the engine compartment.

**INSTALL THE COMPRESSOR ADAPTOR KIT AND COMPRESSOR AT THIS TIME PER THE MANUFACTURERS DIRECTIONS.**
Locate the Discharge Hose from the condenser kit. Attach to #8 fitting below radiator and route up to the compressor.

Attach with the service port at the compressor and (2) #8 o-rings and a few drops of mineral oil.

Locate Liquid Hose, (2) #6 o-rings, Suction Hose and (2) #10 o-rings.

Attach liquid hose to firewall fitting and route down to fitting below the radiator. Use (2) #6 o-rings and a few drops of mineral oil.

Attach Suction Hose to fitting at firewall and other end to the compressor as shown. Use (2) #10 o-rings and a few drops of mineral oil.

Locate Clutch wire (blue) from the thermostat and attach it to one of the white wires from Pressure switch. The other white wire from pressure switch attaches to the compressor clutch.

THE ENGINE COMPARTMENT OF YOUR SYSTEM IS COMPLETE. THE UNIT IS READY FOR EVACUATION AND CHARGING. THIS SHOULD BE DONE BY A QUALIFIED AND CERTIFIED AIR CONDITIONING TECHNICIAN.
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NOTE: COMPRESSOR IS SUPPLIED WITH THE
CORRECT OIL CHARGE. DO NOT ADD OIL TO
SYSTEM.

134a SYSTEMS       24 oz OF REFRIGERANT
Recommends that power fuse is 25amp minimum

Congratulations you have completed the install of your CLASSIC AUTO AIR “Perfect Fit Series” system.
IMPORTANT!
CAUTION: WATER VALVE MUST BE INSTALLED PER THE INSTRUCTIONS.

Classic Auto Air has done extensive testing on the correct method to install the water valve in order to get a repeatable and progressive temperature control.

Locate the bottom connection from the evaporator/heater unit off of the firewall and attach a 6” piece of 5/8” dia. heater hose with the supplied hose clamp. Next attach the inlet side of the water valve using another supplied hose clamp, (make sure the arrow on the water valve points toward the engine) Attach a heater hose from the outlet side of the water valve and route to the connection on the water pump.

NOTE: WATER VALVE = WATER PUMP

CAUTION: WATER VALVE MUST BE INSTALLED ON HEATER LINE ROUTED TO WATER PUMP.

NOTE: COMPRESSOR PURCHASED WITH KIT IS SUPPLIED WITH THE CORRECT OIL CHARGE. DO NOT ADD OIL TO SYSTEM.

134A SYSTEMS 24 oz OF REFRIGERANT

Recommend that power fuse is 25amp minimum